

# Research and Evaluation IGA – Expanded

## Issues:

1. Can the transportation community be more proactive, communicative, and collaborative in developing, evaluating, and implementing research results?
2. How to use transportation research, data, and evaluation techniques to support and improve current and future transportation decision making.
3. Review research funding and related resources in transportation area.
4. Looking to the future, research needs to support a long-term (50 year) vision.
5. Lack of focus on asset management performance and optimization.
6. There is adversity to taking risks with new technology.
7. Research is currently a low priority within the transportation industry.
8. Need to leverage knowledge within the private sector; Michigan has the largest concentration of transportation professionals in the world.
9. Lack of applied research in all modes of transportation.
10. There is a lack of understanding of how the transportation system fits in with the societal needs, both currently and in the future.
11. Data not readily available latent demand by customers for real time data. Insure that data is accurate.
12. Definition of research is differentiated from operational planning as the discovery of knowledge and development technology and processes that are applied in the transportation agency mission.

## Goals:

1. Ensure the transportation community is proactive in research development, open to change and innovation, aggressive in implementation of research results, supportive of training and continuing professional development of personnel.
2. Make Michigan a national leader in implementing and sharing transportation research findings.
3. Make data and research findings accessible to end users in a timely manner.
4. Include innovative and long-term research in the development of Michigan's transportation vision.
5. Educate the public about the importance of research so there are a corresponding political will at all levels to support research with adequate resources.
6. Incentive up to and including finalized/identification to encourage the use of technology across jurisdictional lines and modes of transportation.
7. Michigan should implement more technology and research using regional collaboration and coordination.
8. Increase awareness and application of research.
9. Emphasize definition of the problem and precisely how the research result will assist in solving it.
10. Conduct research to increase an understanding and define current and future societal needs for the transportation system.
11. Participate in national research forums, i.e., TRB, AASHTO, as a lead state.
12. Continue and increase research on all modes of transportation, including transit and non-motorized.
13. Data that is impartial, accurate, timely, understandable and accessible.

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### Actions:

1. Create an easily accessible centralized electronic library for the storage/retrieval of data and research findings. Develop guidelines for the timely input of appropriate data.
2. Utilize public relations, news media, the MDOT web site, and other free media to educate the public and the Legislature on the benefits of transportation research. Work with the universities and other research providers to leverage their information dissemination resources.
3. Develop a process to implement research findings.
4. Develop and promote planned meetings, workshops and training programs for transportation professionals.
5. Develop proactive and transparent research agenda for the short-term and the long-term.
6. Identify world-wide best practices that can be implemented today.
7. Bring together a consortium of transportation experts within two years to address economic, social and environmental trends relevant to transportation research.
8. Develop a curriculum to educate practitioners and students on the need for long-range planning and research.
9. Support and expand the LTAP program to assist in technology transfers across political levels and support the local effort through incentives to use the resulting technology.
10. Assess why technology transfer center is underutilized; develop a plan to reinvigorate transportation research in Michigan.
11. Build partnerships between industry, governmental agencies, universities, and the private sector to identify mutual interests, needs, and to leverage resources.
12. Incentivize implementation of innovation.
13. Develop a collaborative operational test program that includes a mechanism for the collection of accurate and timely data, incentives for private investment and collaboration, and educates the public on benefits of research.
14. Evaluate the balance between the allocation of funds to planning vs. research.
15. Establish formal link between theoretical research staff (academia) and applied research staff (transportation agencies).